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Indian Standard

CODE FOR CARE, MANAGEMENT AND HOUSING OF LABORATORY ANIMALS

PART II LABORATORY DOGS

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1

(Continued on page 2)

Indian Standard

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PART II LABORATORY DOGS

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IS: 6384 (Part II) - 1971

(Continued from page 1)

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Indian Standard CODE FOR CARE, MANAGEMENT AND HOUSING OF LABORATORY ANIMALS PART II LABORATORY DOGS

0. FOREWORD

- **0.1** This Indian Standard (Part II) was adopted by the Indian Standards Institution on 27 December 1971, after the draft finalized by the Live Animals Sectional Committee had been approved by the Agricultural and Food Products Division Council.
- **0.2** Laboratory animals bred and maintained scientifically are necessary to get comparable results in biological experiments. The present code, therefore, lays down guidelines for care, management and housing of laboratory dogs so that a large number of animals of uniform quality is available. It is hoped that the code would streamline and step up facilities for pharmaceutical, pesticide and biologically-oriented research.
- 0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS: 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This code (Part II) prescribes optimum conditions for housing, sanitation, personnel hygiene, feeding, watering, disease control, etc, in relation to care, management and housing of laboratory dogs.

2. LOCATION AND HOUSING

- 2.1 Animal houses should be located in areas free from smoke, obnoxious fumes, dust, noise or extremes of temperatures.
- 2.2 Animal houses should have sufficient space for movement and location of service units.
- 2.3 The area chosen should be maintained hygicnically and should not be overcrowded.

^{*}Rules for rounding off numerical values (revised).

IS: 6384 (Part II) - 1971

- 2.4 Animal houses should be located on dry, elevated and well-drained area.
- 2.5 It should be located away from other animal colonies to minimize disturbance.

3. CONSTRUCTION

- 3.1 Walls The walls should be fire-resistant and impervious to moisture, extremes of temperatures and vermin.
- **3.2 Interior** The inner surface of the walls should be waterproof, smooth and easy to clean.
- 3.3 Roof Concrete roof with adequate insulation is preferable. When the roof is made of sheets or tiles, a false ceiling which is waterproof and temperature- and vermin-proof should be provided.
- **3.4 Floor** The floor should be constructed of cement concrete material and should be waterproof and free from cracks and crevices. The junctions of floor, ceiling and walls of the rooms should be coved.
- **3.5 Doors** Rooms facing each other across a corridor should not have doors opposite to each other. The doors should be made of material which is moisture- and vermin-proof. Adequate latches and locking arrangement should be provided.
- 3.6 Windows There should be adequate provision for windows. The construction of windows should be such that accumulation of dust is minimized.
- **3.7 Air-Exhaust System** Adequate provisions should be made for exhausting the air. Opening should be vermin-proof.
- 3.8 Corridor and Cubicle There should be adequate provisions of corridors in order to protect the animal rooms from direct rays of the sun, rain, heat and cold. In order to minimize the risk of infection due to frequent use of the entrance door by the personnel, a cubicle should be provided at the entrance of each block. This cubicle may also be used for changing of clothes.
- 3.9 Light Arrangements There should be adequate arrangements for lighting the rooms. Lighting fixtures, switches, etc, should be so designed and constructed that they should not afford shelter for rodents and vermin.
- 3.10 Temperature and Ventilation There should be adequate arrangements for checking the temperature and relative humidity of the animal room. Continuous fresh air supply is recommended in case of non-air-conditioned animal rooms. When air-conditioned, a ventilating system capable of giving 6 to 8 changes of fresh air per hour is recommended. The

exhaust fans used should have their frames scaled and screened. All controls for lighting, air-conditioning, exhaust fans, etc, should be outside the animal room.

Note — It is desirable to maintain animal room temperature within the range of $27 \pm 2^{\circ}$ C and relative humidity between 50 and 60 percent.

4. HOUSING AND EQUIPMENT

- 4.1 Kennels The kennels should be of at least 1.6 m³ with an attached run of at least 1.2 m wide and 3.5 m long or more depending on the size of the dog which should communicate with kennels through a trap door. The height of the kennels should be 1.5 m to facilitate cleaning.
- 4.1.1 The kennels may be besides each other along the length of the building, so that the runs may be extended from the kennels in the same direction, thus making it a compact unit. The run should have a cement wall of at least 90 cm height from the ground and the rest 60 cm of the wall should be wire-mesh.
- 4.2 Cages Cages for experimentation should be fabricated of smooth and corrosion-resistant material, which does not tear off or crumble. The cages should be sufficiently light to enable proper handling. They should be of the material which is impervious to liquids and moisture and which could be easily washed, disinfected and sanitized. If dogs are maintained in cages, they should be large enough to allow the animals freedom of movement. For an average size dog, 0.7 m² floor space and 1.2 m height should be provided. It should be 20 cm or more in height than that of the dog. The floor of the cage should be of such material which should not trap the toes and feet of the dogs. Removable trays should be provided below the cage.

5. BEDDING

- 5.1 A wooden bunk or open wooden boxes or both of suitable size should be provided for the animals for resting. If possible it should be covered with some soft material, namely, old cloth or pieces of blanket which are clean and disinfected.
- **5.2** Pregnant animals should be provided with boxes not less than 60×100 cm for a medium sized animal and larger, if it is a bigger animal.

6. FOOD

- **6.1** Food and clean water should be provided in separate troughs made of non-corrosive material.
- 6.2 The food shall be free from important kenine pathogens, zoonoses and vermin and maintained in clean condition. It should also be free from additives like drugs, hormones, antibiotics and other substances which may create abnormal physiological conditions. The food storage and preparation should be done in a separate room.

IS: 6384 (Part II) - 1971

7. DISEASE AND PARASITE CONTROL PROCEDURES

- 7.1 Quarantine All animals should be kept in quarantine till passed as healthy. Among the diseases that have to be eliminated are distemper, ringworm and mange. If the dog bites any personnel of the animal house, the dog should be kept in quarantine and watched for not less than 21 days before taking for experimentation. All dogs in one quarantine area should remain in quarantine for the full period of the last dog introduced in that area.
- 7.2 Personnel responsible for the care of animals in quarantine should not work in quarters, where healthy animals are maintained.
- 7.3 Isolation Sick dogs should be kept in isolation and should not be allowed to come in contact with healthy animals.

8. PERSONNEL

- **8.1** The persons entering the animal room should be free from disease and should wear clean and sterilized clothes. They should be periodically checked for any sign of communicable disease.
- 8.2 The staff that cares for animals in quarantine should not be permitted to handle animals in other colonies.
- 8.3 The personnel should be adequately protected against dog bite.

9. CLEANING, STERILIZATION AND DISPOSAL

- 9.1 Cleaning of Animal House The animal house should have adequate water supply, sterilizing and washing facilities. The material for sterilization from animal rooms should be sterilized and then washed, dried and transferred to the rooms.
- **9.2 Cleaning of Cages** The routine washing may be done at least twice a week and sterilization once in a week. The items that cannot be accommodated inside the sterilizer may be suitably disinfected. The room floor and cage trays should be cleaned and washed every day. The walls should be washed once a week.
- 9.3 Disposal There should be adequate arrangements to incinerate dead animals.

10. ANIMAL HOUSE INCHARGE

10.1 The person incharge of the animal house should be a qualified veterinarian or medical or zoology graduate with adequate background of laboratory animal husbandry in feeding, management and care of animals.

11. RECORDS

11.1 Suitable records pertaining to the provisions of the code should be maintained.

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